

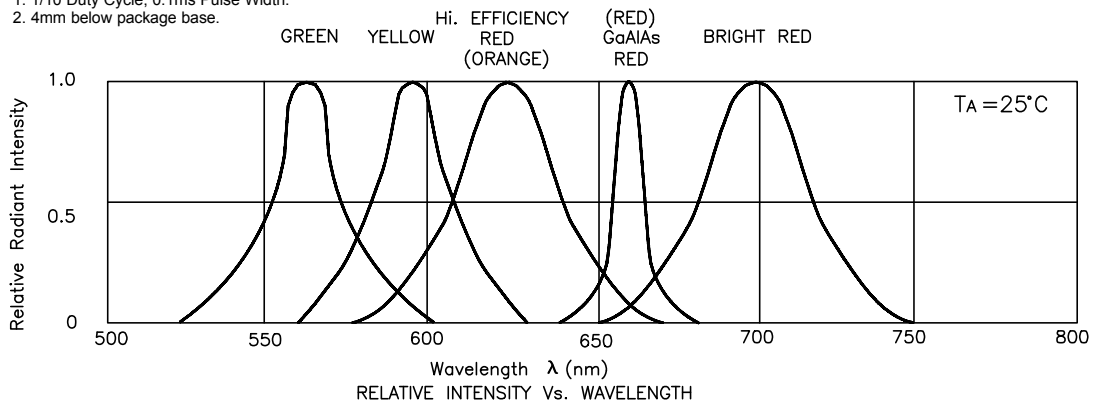
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Red Bright Red High Efficiency Red Orange Green Yellow Super Bright Red	660 700 625 625 565 590 660		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Red Bright Red High Efficiency Red Orange Green Yellow Super Bright Red	20 45 45 45 30 35 20		nm	IF=20mA
C	Capacitance	Red Bright Red High Efficiency Red Orange Green Yellow Super Bright Red	40 40 12 12 45 10 95		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Red Bright Red High Efficiency Red Orange Green Yellow Super Bright Red	1.7 2.0 2.0 2.0 2.2 2.1 1.85	2.1 2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All	10		uA	VR = 5V

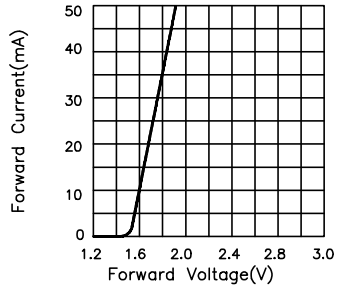
Absolute Maximum Ratings at T_A=25°C

Parameter	Red	Bright Red	High Efficiency Red	Orange	Green	Yellow	Super Bright Red	Units
Power dissipation	120	120	105	105	105	105	100	mW
DC Forward Current	30	25	30	30	25	30	30	mA
Peak Forward Current [1]	150	150	150	150	150	150	150	mA
Reverse Voltage	5	5	5	5	5	5	5	V
Operating/Storage Temperature	-40 °C To +85 °C							
Lead Soldering Temperature [2]	260 °C For 5 Seconds							

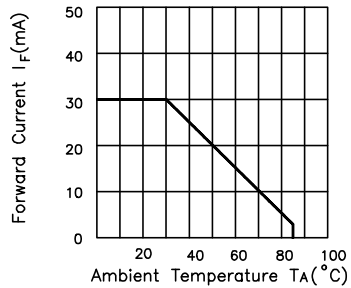
- Notes:
 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
 2. 4mm below package base.



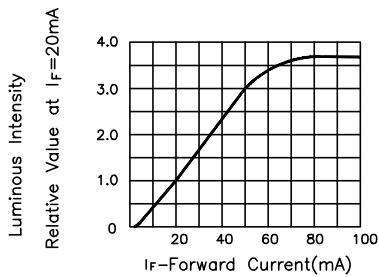
Red L-51RD



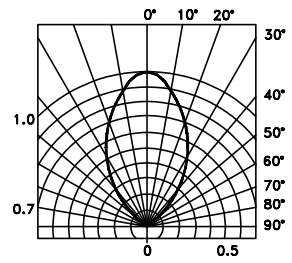
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

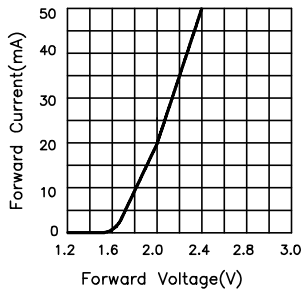


LUMINOUS INTENSITY Vs. FORWARD CURRENT

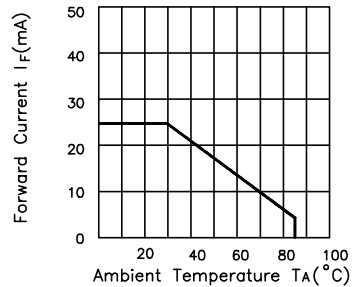


SPATIAL DISTRIBUTION

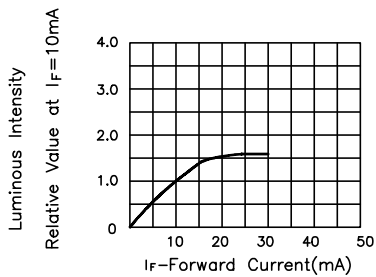
Bright Red L-51HD



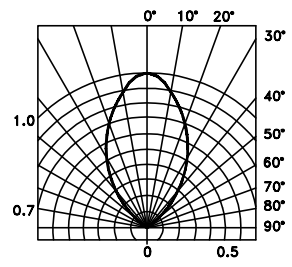
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

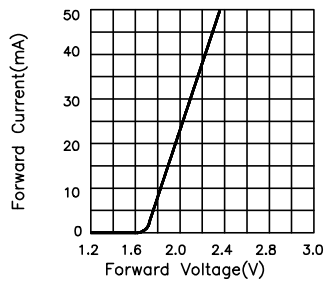


LUMINOUS INTENSITY Vs. FORWARD CURRENT

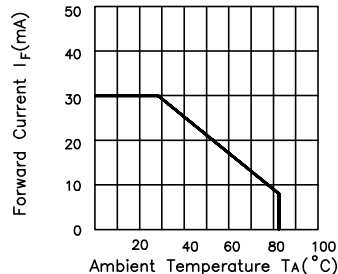


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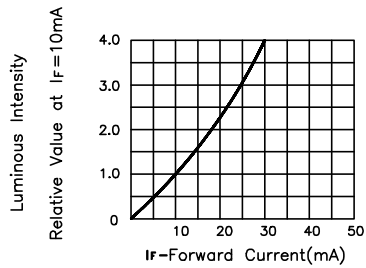
High Efficiency Red L-51ID
Orange L-51ED



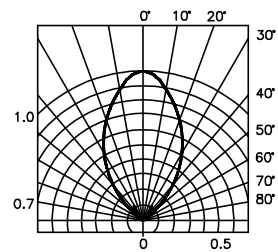
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

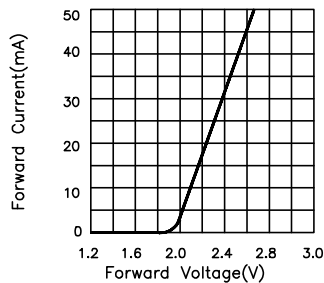


LUMINOUS INTENSITY Vs. FORWARD CURRENT

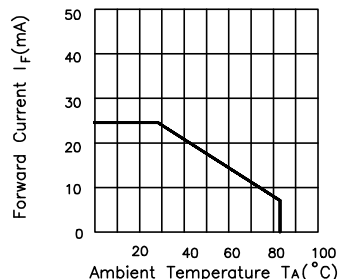


SPATIAL DISTRIBUTION

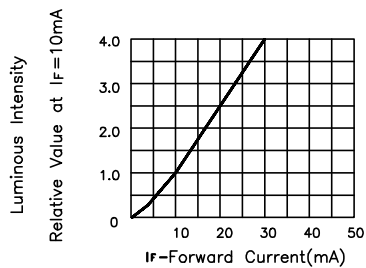
Green L-51GD



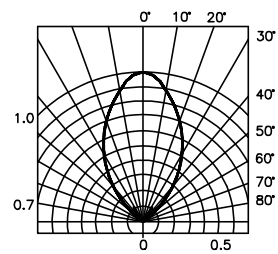
FORWARD CURRENT Vs. FORWARD VOLTAGE



Ambient Temperature T_A (°C)

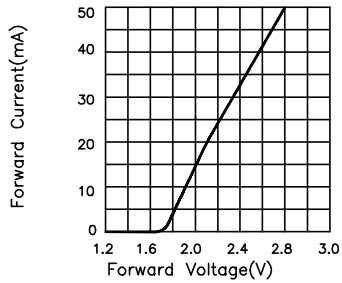


LUMINOUS INTENSITY Vs. FORWARD CURRENT

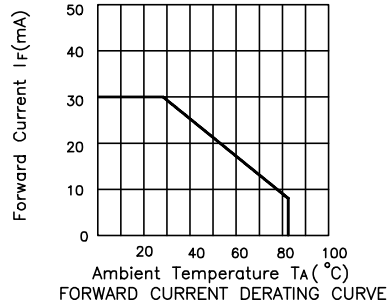


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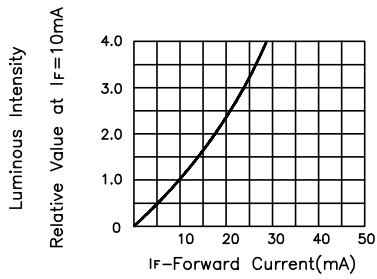
Yellow L-51YD



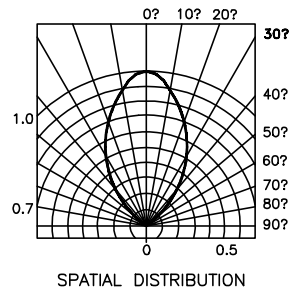
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

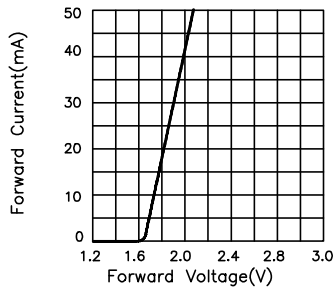


LUMINOUS INTENSITY Vs. FORWARD CURRENT

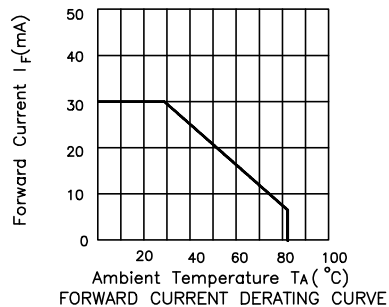


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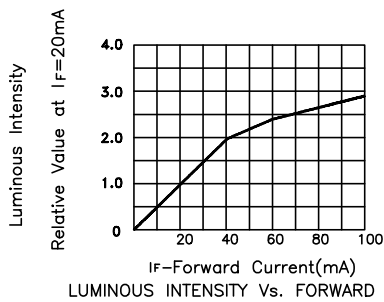
Super Bright Red L-51SRD



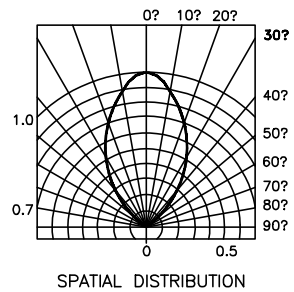
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION